



# **Wisconsin Youth Tobacco Survey 2000**

***Prevalence of Tobacco Use***

**Prepared by the**

**Bureau of Chronic Disease Prevention and Health Promotion  
Division of Public Health  
Department of Health and Family Services**

## Background & Methodology

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### **Purpose**

The Wisconsin Youth Tobacco Survey (WYTS) is a key measure of youth tobacco use in Wisconsin. The WYTS tracks tobacco use, attitudes, and related behaviors among public school students enrolled in middle and high school (grades 6-12). This report addresses the prevalence of tobacco use among youth and is the first in a series that will summarize the 2000 WYTS findings. It provides baseline data on tobacco use by public middle and high school students.

### **Methodology**

The Department of Health and Family Services' Division of Public Health, the Department of Public Instruction, school districts and schools across Wisconsin cooperated in the survey administration. Surveys were administered during the months of March, April, and May 2000 in 82 randomly chosen schools. The Youth Tobacco Survey questionnaire was developed and supported by the Centers for Disease Control and Prevention (CDC) Office on Smoking and Health.

All public schools containing grades 6, 7, or 8 (for middle schools) or 9, 10, 11, or 12 (for high schools) were included in the sampling frame. All students in the selected classes were eligible to participate in the survey. The same Wisconsin Youth Tobacco Survey questions and the same definitions were used for both the high school and middle school surveys.

Thirty-eight of the forty-nine randomly selected middle schools participated in the Wisconsin Youth Tobacco Survey. Of the 1,626 middle school students identified, 1,440 (89%) completed questionnaires. The middle school response rate, which reflects both the school response rate and the student response rate, was 69%.

Forty-four of the fifty randomly selected high schools participated in the Wisconsin Youth Tobacco Survey. Of the 1,565 high school students identified, 1,307 (84%) completed questionnaires. The high school response rate was 74%.

The 2000 YTS is the most comprehensive dataset to provide valid statewide estimates of tobacco use among the Wisconsin public middle school and high school student population. It is also the first statewide data collected on tobacco use among middle school youth.

The survey results have been weighted to account for non-response and to reflect the overall Wisconsin public middle and high school population. The results can be used to make estimates of tobacco use risk behaviors of all public school students in grades 6-8 and 9-12 in Wisconsin.

Due to the sample size, characterization of findings by county, region, or racial/ethnic group cannot be reported.

For the purposes of this report all number values have been rounded. The numbers, to one decimal, with 95% confidence intervals, are reported in Tables A and B.

### **The Wisconsin Tobacco Control Program**

The Wisconsin Tobacco Control Program, Wisconsin Department of Health and Family Services, is committed to reducing the burden of tobacco in Wisconsin. The Program, in collaboration with Wisconsin local health departments and organizations active in tobacco control, works towards the following goals to:

- ❖ Eliminate exposure to environmental tobacco smoke
- ❖ Reduce smoking initiation among youth
- ❖ Promote quitting among adults and young people
- ❖ Identify and eliminate disparities among population groups

## Background & Methodology (*continued*)

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For more information on the Wisconsin Tobacco Control Program or the Wisconsin Youth Tobacco Survey contact:

Tobacco Control Program  
Division of Public Health  
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P.O. Box 2659  
Madison, WI 53701-2659

You may also visit the  
Wisconsin Tobacco Control Program's  
web site located at:  
<http://www.dhfs.state.wi.us/health/TobaccoControl/>

### **Acknowledgements**

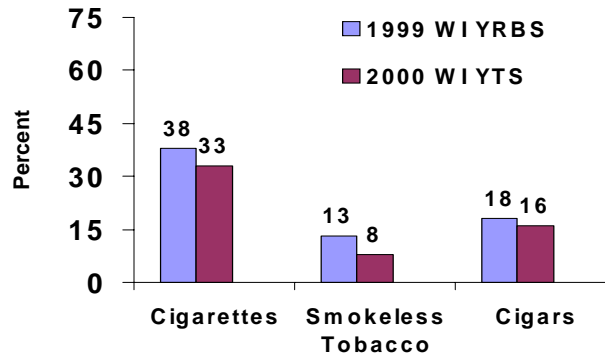
Many dedicated individuals contributed to the 2000 Wisconsin Youth Tobacco Survey. We wish to thank all the students, teachers, principals and school districts that participated, community partners and advocates, the University of Wisconsin Comprehensive Cancer Center that served as the contractor for survey administration, the Department of Public Instruction, and the Centers for Disease Control (CDC) Office on Smoking and Health and Division of Adolescent and School Health.

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## Key Findings

Figure 1: Current tobacco use, Wisconsin high school students, 1999 Youth Risk Behavior Survey (YRBS) vs. 2000 Youth Tobacco Survey (YTS)



- Cigarette use among Wisconsin high school students has fallen five percentage points, from 38% in 1999 to 33% in 2000.
- Overall, 46% of middle school and 69% of high school students have tried some tobacco product.
- Sixteen percent (16%) of middle school students and 39% of high school students reported current use of some form of tobacco (used on at least one day out of the previous thirty days).
- Twelve percent (12%) of middle school students and 33% of high school students are current cigarette smokers (smoked on at least one day out of the previous thirty days). By grade 12, 39% of students report that they are current smokers.
- High school students were 5 times more likely than middle school students (20% compared to 4%) to smoke cigarettes frequently, lighting up on least 20 of the past 30 days.
- The rate of current smoking increases more rapidly among middle school students (3% in grade 6 to 20% in grade 8) than high school students (26% in grade 9 to 39% in grade 12).
- Two to three times as many middle and high school students reported smoking cigars as using smokeless tobacco. In high school, 16% of students reported current use of cigars, while 8% used smokeless tobacco. Males were more likely than females to use these tobacco products.
- By grade 12 nearly one third of students have tried smokeless tobacco and over half have tried smoking cigars.
- While rates of smokeless tobacco use are lower than rates for other tobacco products, there is still a steady increase in the number of users as students progress from grade 6 (1%) to grade 12 (11%).

Figure 2: Tobacco use, Wisconsin middle school students

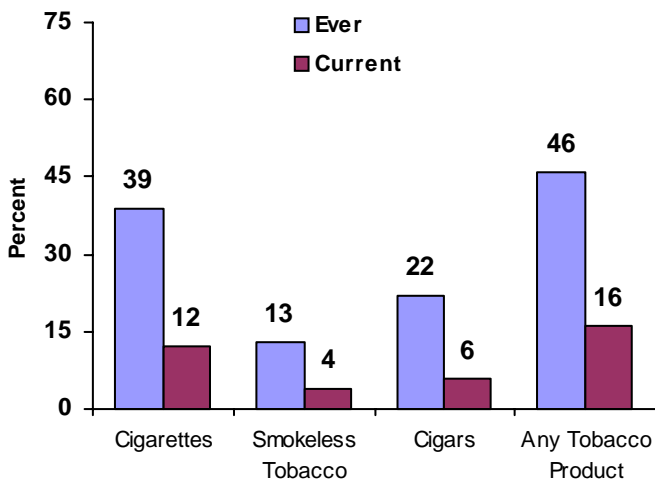
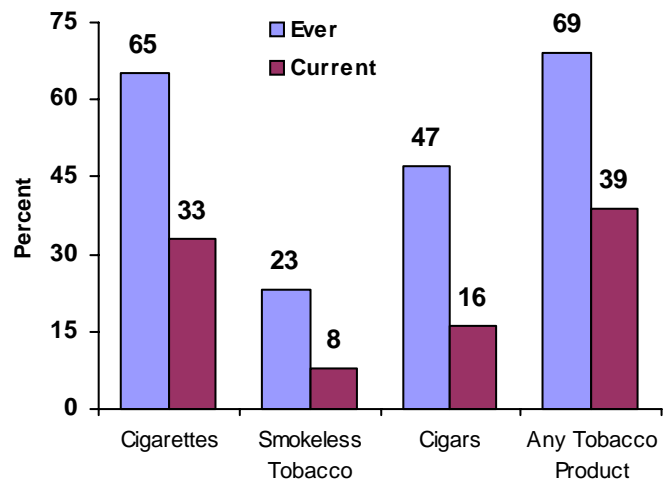


Figure 3: Tobacco use, Wisconsin high school students



# Tobacco Use Among Wisconsin High School Students, 1999 vs 2000

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## Questions and Definitions

### **Current Use of Any of the Following: Cigarettes, Cigars/Cigarillos, or Smokeless Tobacco**

In spring 1999, as part of the Youth Risk Behavior Survey (YRBS), and in spring of 2000, as part of the Wisconsin Youth Tobacco Survey (WYTS), **high** school students were asked:

- ❖ “During the past 30 days, on how many days did you smoke cigarettes?”
- ❖ “During the past 30 days, on how many days did you smoke cigars, cigarillos or little cigars?”
- ❖ “During the past 30 days, on how many days did you use chewing tobacco, snuff or dip?”

**The response options were (a) 0 days (b) 1 to 2 days (c) 3 to 5 days (d) 6 to 9 days (e) 10 to 19 days (f) 20 to 29 days (g) All 30 days.**

**Current cigarette, cigar or smokeless tobacco users** are those who responded they had used the indicated tobacco product on at least one of the previous 30 days. Respondents may be represented more than once on the graph. (See Figure 1: *Current tobacco use, Wisconsin high school students, 1999 YRBS vs. 2000 YTS*, page 4) For instance if they indicated they had smoked cigarettes and used smokeless tobacco they would be represented in both totals.

## Results

Although the WYTS represents the first comprehensive survey of tobacco use among middle and high school students, several of the same tobacco related questions have been asked of high school students in past years as part of the Wisconsin Youth Risk Behavior Survey. The answers to the same questions asked in the two different surveys are comparable. Dr. Charles W. Warren, US Centers for Disease Control and Prevention (CDC) Office of Smoking and Health, stated, “...that there is strong validity between the same smoking questions on the YRBS and the YTS from several state and national studies. Moreover, Wisconsin’s drop on this question [although larger in magnitude] is consistent with a national drop of around 2-3 percent in the last two years in high school rates by a national survey.”

Overall, rates of tobacco use among Wisconsin’s high school youth have declined from 1999 to 2000, as shown when comparing the results of the 1999 Wisconsin Youth Risk Behavior Survey and the 2000 Wisconsin Youth Tobacco Survey. (See Figure 1: *Current tobacco use, Wisconsin high school students, 1999 YRBS vs. 2000 YTS*, page 4) This mirrors the decline in tobacco use seen nationally among high school youth, as reported by the Centers for Disease Control and Prevention from the results of the 1999 YRBS reported by all participating states (MMWR, June 9, 2000).

## Use of Any Tobacco Product

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### Questions and Definitions

#### **Current Use of Any Tobacco Product**

Middle and high school students were asked:

- ❖ “During the past 30 days, on how many days did you smoke cigarettes?”
- ❖ “During the past 30 days, on how many days did you smoke cigars, cigarillos or little cigars?”
- ❖ “During the past 30 days, on how many days did you smoke bidis?”
- ❖ “During the past 30 days, on how many days did you smoke tobacco in a pipe?”
- ❖ “During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?”

**The response options were (a) 0 days (b) 1 to 2 days (c) 3 to 5 days (d) 6 to 9 days (e) 10 to 19 days (f) 20 to 29 days (g) All 30 days.**

**Current tobacco use** was defined as a respondent that said he or she used any of the five product classes (cigarettes, cigars, cigarillos, little cigars, bidis, pipe, chewing tobacco, snuff, or dip) on at least one day out of the previous 30 days. A respondent was only counted once no matter how many different products that he or she might have used during the past 30 days.

#### **Ever Use of a Tobacco Product**

Middle and high school students were asked:

- ❖ “Have you ever tried cigarette smoking, even one or two puffs?”
- ❖ “Have you ever tried smoking cigars, cigarillos or little cigars, even one or two puffs?”
- ❖ “Have you ever used chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?”

**The response options were (a) Yes (b) No.**

- ❖ “Have you ever tried smoking any of the following:”

**The response options were (a) Bidis (b) Kreteks (c) I have tried both bidis and kreteks (d) I have never smoked bidis or kreteks.**

**Ever tobacco use** was defined as responding yes to any of the first three questions, or a, b, or c to the question on bidis and kreteks. Each respondent was only counted once no matter how many different products he or she might have ever used.

**Note:** The tobacco products combined to define **current tobacco use** (cigarettes, cigars, cigarillos, little cigars, chewing tobacco, snuff, dip, pipe, and/or bidis) vary slightly from the tobacco products combined to define **ever tobacco use** (cigarettes, cigars, cigarillos, little cigars, chewing tobacco, snuff, dip, bidis, and/or kreteks). Kreteks were not included in current tobacco use and pipe smoking was not included in characterizing ever tobacco use.

## Use of Any Tobacco Product (*continued*)

### Results

Figure 4: Current use of any tobacco products by gender, Wisconsin middle and high school students

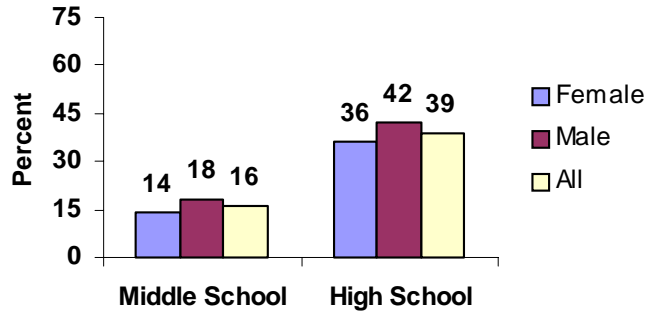
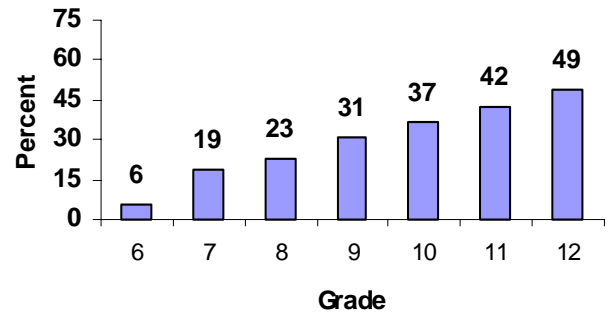


Figure 5: Current use of any tobacco products by grade, Wisconsin middle and high school students



Overall, current tobacco use prevalence is 2.5 times higher for high school students than middle school (39% compared to 16%).

Fourteen percent (14%) of middle school girls compared to 18% of middle school boys are current users of some form of tobacco. In high school 36% of females compared to 42% of males are current users of some form of tobacco. For both middle and high school students, the prevalence of current tobacco use is greater for boys than girls. This difference is accounted for by higher rates of smokeless tobacco and cigar use among boys.

Sixteen percent (16%) of middle school students and 39% of high school students reported current use of some form of tobacco. In grade 6, six percent (6%) of students are current users of some tobacco product and this rate more than triples by grade 7 (19%). By grade 12, almost half (49%) of students are current users of some form of tobacco.

# Cigarette Smoking

## Questions and Definitions

### Current and Frequent Cigarette Smoking

Middle and high school students were asked:

- ❖ “During the past 30 days, on how many days did you smoke cigarettes?”  
The response options were (a) 0 days (b) 1 to 2 days (c) 3 to 5 days (d) 6 to 9 days (e) 10 to 19 days (f) 20 to 29 days (g) All 30 days.

**Current** cigarette smoking was defined as smoking at least one day out of the previous 30 days.

**Frequent** cigarette smoking was defined as smoking on 20 or more days of the previous 30 days.

### Ever Cigarette Smoking

Middle and high school students were asked:

- ❖ “Have you ever tried cigarette smoking, even one or two puffs?”  
The response options were (a) Yes (b) No.

Ever cigarette smoking was defined as responding ‘Yes.’

## Results

Figure 6: Current cigarette smoking by gender, Wisconsin middle and high school students

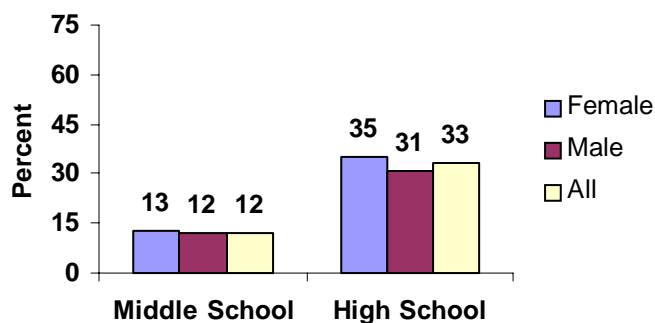
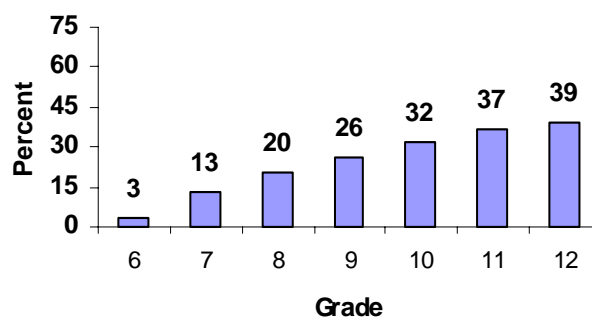


Figure 7: Current cigarette smoking by grade, Wisconsin middle and high school students



Current cigarette smoking is defined as smoking at least one day of the previous thirty days. Overall current smoking prevalence is 2.8 times greater in high school than middle school (33% vs. 12%). Three percent (3%) of students in grade 6 and 39% in grade 12 report that they are current smokers. The percent of current smoking increases more rapidly among middle school students (3% in grade 6 to 20% in grade 8) than among high school students (26% in grade 9 to 39% in grade 12). By grade 8, 20% of students report they are current smokers and by grade 12 that percent has almost doubled to 39%.

In both middle school and high school, the gender differences for cigarette smoking are relatively small. There is a slight female predominance in cigarette smoking among high school girls (35%) as compared to high school boys (31%).



## Cigarette Smoking (*continued*)

Figure 8: Frequent cigarette smoking by gender, Wisconsin middle and high school students

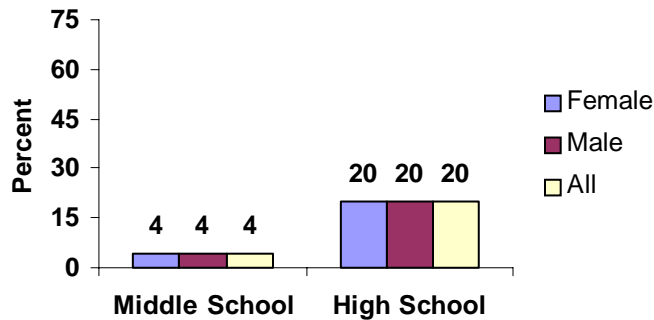
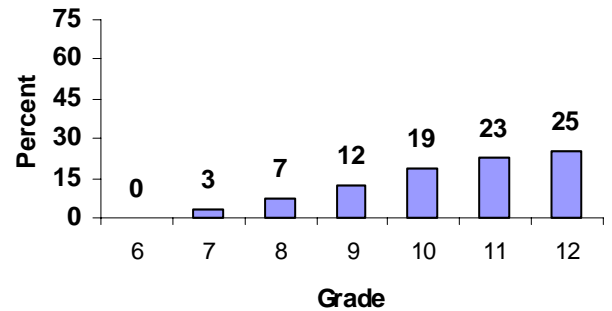


Figure 9: Frequent cigarette smoking by grade, Wisconsin middle and high school students



Frequent use of cigarettes is defined as smoking at least 20 of the previous 30 days. Overall, frequent smoking prevalence is lower than current smoking, especially for middle school students. Frequent smoking prevalence is five times higher in high school than middle school students (20% vs. 4%) with identical prevalence for boys and girls in middle school (4%) and high school (20%).

Figure 10: Ever cigarette smoking by gender, Wisconsin middle and high school students

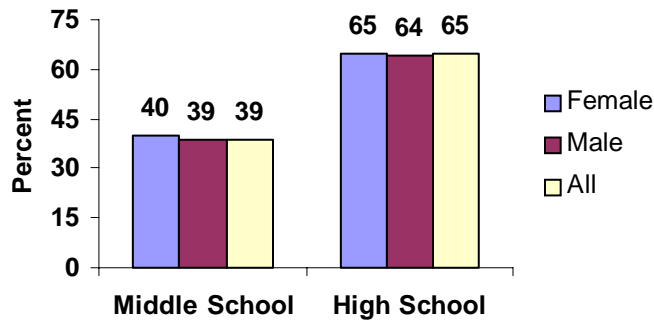
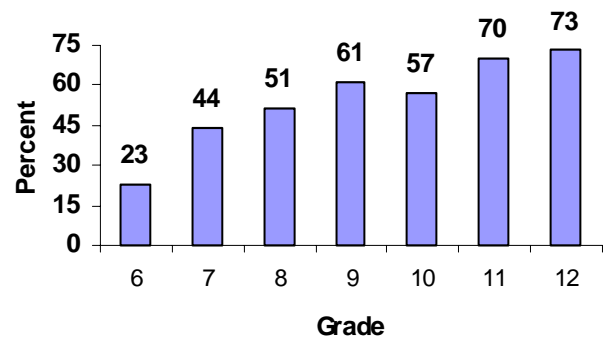


Figure 11: Ever cigarette smoking by grade, Wisconsin middle and high school students



Overall, 39% of middle school students and 65% of high school students have ever tried smoking cigarettes. The prevalence of having ever tried smoking cigarettes was virtually identical among males and females.

# Smokeless Tobacco Use (Chew, Snuff, or Dip)

## Questions and Definitions

### Current and Frequent Smokeless Tobacco Use

Middle and high school students were asked:

- ❖ “During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?”  
The response options were (a) 0 days (b) 1 to 2 days (c) 3 to 5 days (d) 6 to 9 days (e) 10 to 19 days (f) 20 to 29 days (g) All 30 days.

**Current smokeless tobacco use** was defined as using chewing tobacco, snuff or dip at least one day out of the previous 30 days.

**Frequent smokeless tobacco use** was defined as using chewing tobacco, snuff or dip on at least 20 or more days of the previous 30 days.

### Ever Smokeless Tobacco Use

Middle and high school students were asked:

- ❖ “Have you ever used chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?”  
The response options were (a) Yes (b) No.

**Ever smokeless tobacco use** was defined as responding ‘Yes.’

## Results

Figure 12: Current smokeless tobacco use by gender, Wisconsin middle and high school students

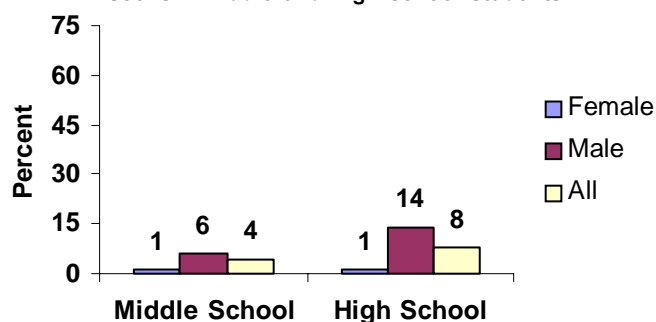
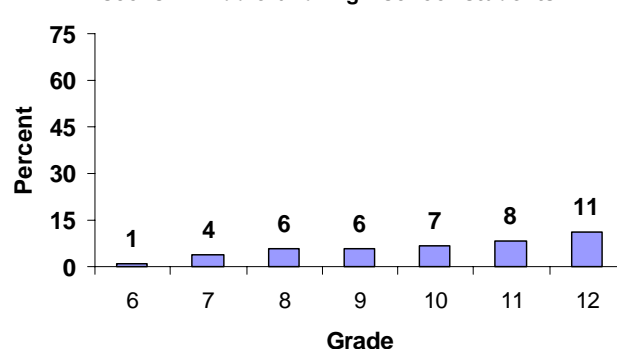


Figure 13: Current smokeless tobacco use by grade, Wisconsin middle and high school students



Current use of smokeless tobacco is defined as having used chewing tobacco, snuff or dip on at least one day out of the past thirty. Overall prevalence of current smokeless tobacco use is much lower than current smoking, especially for high school students. There is a steady increase in the number of users as students progress from grade 6 to grade 12 (1% to 11%).

There is a definite male predominance in the use of smokeless tobacco. High school boys are more than twice as likely as middle school boys to report using chewing tobacco, snuff or dip (14% versus 6%). One percent (1%) of middle and high school females report current smokeless tobacco use.

Frequent use of smokeless tobacco is reported among one percent (1%) of middle school and four percent (4%) of high school males. Females do not report frequent use of smokeless tobacco.

There is a steady increase from grade 6 to grade 12 in the rate of having ever tried smokeless tobacco. By grade 12, nearly one third of students have tried smokeless tobacco.

# Cigar/Cigarillo Use

## Questions and Definitions

### Current and Frequent Cigar/Cigarillo Use

Middle school and high school students were asked:

- ❖ “During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?”  
The response options were (a) 0 days (b) 1 to 2 days (c) 3 to 5 days (d) 6 to 9 days (e) 10 to 19 days (f) 20 to 29 days (g) All 30 days.

**Current cigar, cigarillo, or little cigar smoking** was defined as smoking at least one day out of the previous 30 days.

**Frequent cigar, cigarillo, or little cigar smoking** was defined as smoking on 20 or more days of the previous 30 days.

### Ever Cigar/Cigarillo Use

Middle and high school students were asked:

- ❖ “Have you ever tried smoking cigars, cigarillos, or little cigars, even one or two puffs?”  
The response options were (a) Yes (b) No.

**Ever cigar use** was defined as responding ‘Yes.’

## Results

Figure 14: Current cigar smoking by gender, Wisconsin middle and high school students

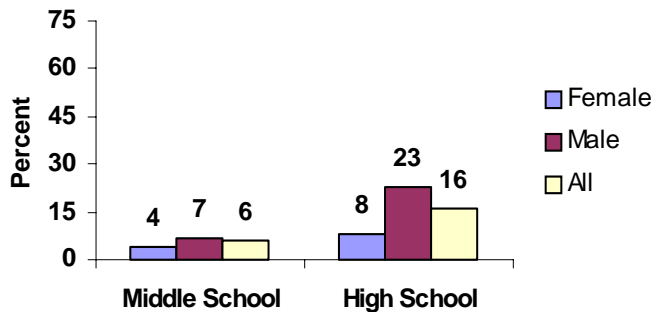
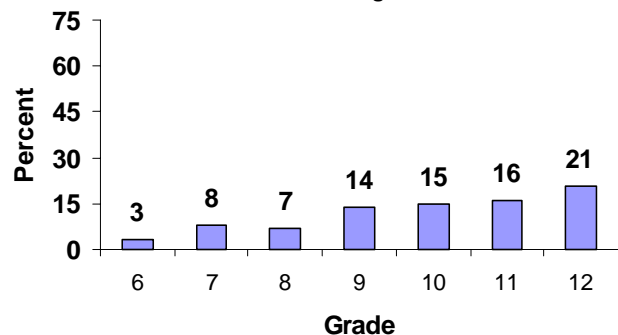


Figure 15: Current cigar smoking by grade, Wisconsin middle and high school students



Current cigar smokers are defined as youth who have smoked cigars at least one day out of the past thirty days. Rates of current cigar smoking increase steadily from grade 6 to grade 12. The prevalence of current cigar smoking is three percent (3%) among students in grade 6. This almost triples, in one year, to eight percent (8%) in grade 7. By grade 12, one fifth of students (21%) are current cigar smokers. Again, as with smokeless tobacco, there is a male predominance of cigar smokers, especially in high school, with 23% of males compared with eight percent (8%) of females reporting current cigar use.

Middle school students did not report frequent use of cigars (use on 20 or more days of the previous 30 days). Two percent (2%) of high school males and no high school females reported frequent cigar use.

A high percentage of students have tried cigar smoking. By the end of middle school, a third of students has tried cigars (29% in grade 8). By grade 12, over half of students have tried smoking cigars (56%).

## Use of Other Tobacco Products

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### Tobacco in a Pipe

#### Questions and Definitions

##### Current Use of Tobacco in a Pipe

Middle and high school students were asked:

- ❖ *“During the past 30 days, on how many days did you smoke tobacco in a pipe?”*  
**The response options were (a) 0 days (b) 1 to 2 days (c) 3 to 5 days (d) 6 to 9 days (e) 10 to 19 days (f) 20 to 29 days (g) All 30 days.**

**Current tobacco in a pipe smoking** was defined as smoking at least one day out of the previous 30 days.

#### Results

Overall, four percent (4%) of middle school students and five (5%) percent of high school students report current pipe [tobacco] use. In middle school three percent (3%) of girls and five percent (5%) of boys report current pipe smoking; in high school two percent (2%) of girls and seven percent (7%) of boys report current pipe smoking.

### Bidis and Kreteks

#### Questions and Definitions

Bidis (or “beedies”) are small brown cigarettes from India made of tobacco wrapped in a leaf tied with thread. Kreteks are cigarettes made of tobacco and clove extract.

##### Current Use of Bidis

Middle and high school students were asked:

- ❖ *“During the past 30 days, on how many days did you smoke bidis?”*  
**The response options were (a) 0 days (b) 1 to 2 days (c) 3 to 5 days (d) 6 to 9 days (e) 10 to 19 days (f) 20 to 29 days (g) All 30 days.**

**Current bidi smoking** was defined as smoking at least one day out of the previous 30 days.

##### Ever Use of Bidis and Kreteks

Middle and high school students were asked:

- ❖ *“Have you ever tried smoking any of the following:”*  
**The response options were (a) Bidis (b) Kreteks (c) I have tried both bidis and kreteks (d) I have never smoked bidis or kreteks.**

**Ever bidi or kreteck use** was defined as responding a, b or c. Each respondent was only counted once no matter whether he or she indicated trying bidis, kreteks or both.

#### Results

Four percent (4%) of middle school students and five percent (5%) of high school students are current users of bidis (smoked bidis on at least one of the 30 previous days). There was very little difference in prevalence by gender.

Eight percent (8%) of middle school students and 15% of high school students report having ever tried bidis or kreteks.

## Detailed Tables

### Data From the Wisconsin Youth Tobacco Survey

**TABLE A: Statistical Data and Confidence Interval Information--Middle School**

<u>2000 Middle School Students</u>		Current cigarette use		Current cigar use		Current smokeless tobacco use		Current use of any tobacco product	
		N=1,393		N=1,426		N=1,408		N=1,439	
Category		%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Sex</b>									
	Female	12.7	±3.3	4.4	±1.8	1.2	±0.8	14.4	±3.4
	Male	11.9	±2.5	7.4	±1.9	5.9	±1.7	17.7	±3.6
<b>Race/Ethnicity</b>									
	White	10.9	±2.4	4.9	±1.5	3.4	±1.0	13.9	±2.8
	Black	14.1	±2.6	10.0	±3.0	1.6	±2.0	24.3	±4.9
	Hispanic	22.3	±10.2	9.1	±5.7	5.8	±5.6	25.8	±9.0
	Other	18.9	±9.7	12.2	±7.2	8.3	±5.8	24.5	±9.0
<b>Grade</b>									
	6 <sup>th</sup>	3.1	±1.4	2.6	±1.9	0.9	±0.9	5.6	±2.0
	7 <sup>th</sup>	13.1	±3.7	8.2	±3.3	3.5	±2.1	18.6	±4.6
	8 <sup>th</sup>	20.0	±5.1	6.8	±1.9	6.1	±2.7	23.2	±5.7
<b>Total</b>		12.2	±2.2	5.9	±1.6	3.6	±1.1	16.1	±3.0

**TABLE B: Statistical Data and Confidence Interval Information--High School**

<u>2000 High School Students</u>		Current cigarette use		Current cigar use		Current smokeless tobacco use		Current use of any tobacco product	
		N=1,284		N=1,296		N=1,283		N=1,305	
Category		%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Sex</b>									
	Female	35.0	±3.8	8.1	±2.6	0.9	±0.8	36.2	±4.3
	Male	31.0	±4.0	23.4	±4.5	13.6	±4.9	42.1	±5.7
<b>Race/Ethnicity</b>									
	White	32.9	±3.2	16.5	±3.4	7.8	±3.2	39.4	±4.3
	Black	12.7	±9.4	6.0	±6.2	2.0	±3.3	19.1	±14.2
	Hispanic	38.4	±12.0	22.5	±9.5	8.0	±5.5	47.3	±11.6
<b>Grade</b>									
	9 <sup>th</sup>	25.7	±4.6	13.7	±4.6	5.8	±3.8	31.2	±7.0
	10 <sup>th</sup>	31.8	±6.1	14.9	±3.5	6.6	±3.3	37.0	±6.0
	11 <sup>th</sup>	36.6	±5.1	15.8	±4.7	7.6	±4.5	42.4	±4.9
	12 <sup>th</sup>	38.6	±4.1	20.9	±5.3	10.5	±4.9	48.6	±5.2
<b>Total</b>		32.9	±2.5	16.1	±3.0	7.6	±2.9	39.4	±3.5

# **Wisconsin Youth Tobacco Survey 2000**

**Prepared by the  
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Department of Health and Family Services**

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